

# SAML2XMLObjectAttributeEncoder

## SAML 2 XMLObject Attribute Encoder

The SAML 2 XMLObject attribute encoder creates SAML 2 `<Attribute>` elements from resolved attributes with an `<AttributeValue>` element for each value. The content of the `<AttributeValue>` element is XML. This encoder is only used for SAML 2 messages and will be ignored when the IdP is answering other protocol messages.



This encoder only operates on attributes whose values are XMLObjects.

### Define the Encoder

Attribute encoders are defined in a `<resolver:AttributeDefinition>` after all `<resolver:Dependency>`.

To define a new SAML 1 XMLObject attribute encoder, create a `<resolver:AttributeEncoder xsi:type="SAML2XMLObject" xmlns="urn:mace:shibboleth:2.0:attribute:encoder">` with the following required attribute:

- **name** - this becomes the `Name` attribute on the created SAML 2 `<Attribute>` element

and the following optional attributes:

- **nameFormat** - this becomes the `NameFormat` attribute on the created SAML 2 `<Attribute>` element (default value: `urn:oasis:names:tc:SAML:2.0:attrname-format:uri`)
- **friendlyName** - this becomes the `FriendlyName` attribute on the created SAML 2 `<Attribute>` element

#### SAML 2 XMLObject Attribute Encoder within a Simple Attribute Definition

```
<resolver:AttributeDefinition id="UNIQUE_ID" xsi:type="ad:Simple">
  <resolver:Dependency ref="DEFINITION_ID_1" />
  <resolver:Dependency ref="CONNECTOR_ID_2" />
  <resolver:AttributeEncoder xsi:type="SAML2XMLObject" xmlns="urn:mace:shibboleth:2.0:attribute:encoder"
    name="ATTRIBUTE_NAME_1" />
</resolver:AttributeDefinition>
```



Defining more than one attribute encoder allows a deployer to transform a single attribute into multiple `<Attribute>` with different names and /or namespaces.